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| 10/023,995 | 12/21/2001 | Werner Brettschneider | P21489 | 8163 |
| 7055 | 7590 | 08-17/2004 | EXAMINER | |
| GREENBLUM & BERNSTEIN, P.L.C. | | | SAVAGE, MATTHEW O | |
| 1950 ROLAND CLARKE PLACE | | | ART UNIT | |
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1724

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--------------------------------------|---|
| Office Action Summary | Application No. 10/023,995 | Applicant(s) BRETTSCHEIDER ET AL. | |
| | Examiner Matthew O Savage | Art Unit 1724 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 23-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3-12-02</u> | 6) <input type="checkbox"/> Other: _____ |

Applicant's election with traverse of group I in the reply filed on 6-18-04 is acknowledged. The traversal is on the ground(s) that examination of both groups in the same application would not impose an undue burden upon the examiner. This is not found persuasive because examination of group I only requires a search in class 29 whereas examination both groups would require searches in classes 29, 162, 209, and 210 of which would impose a serious burden upon the examiner. In addition set forth in the restriction requirement mailed on 2-17-04, the process is also considered patently distinct from the product since the product could be made by another and materially different process, for example, by a process excluding the step of inserting profiled pieces into the openings because product claim 23 does not specify the profiled pieces as being located within the openings.

The requirement is still deemed proper and is therefore made FINAL.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the lines of the fastening holes as being curved as recited in claim 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Art Unit: 1724

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to line 2 of claim 15, it is unclear as to what dimensional range "short" implies.

Concerning line 2 of claim 19, it is unclear as to what point of reference the fastening holes are "spaced out" from.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 11, 14-16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Aikawa.

With respect to claim 1, Aikawa discloses a process for manufacturing screens suitable for use in a wet screening fibrous paper suspensions including at least one screen plate (see FIG. 1) having a number of sorting apertures, the process including providing a number of fastening openings in the at least one screen plate (e.g., for receiving bolts 108), and inserting profiled pieces (e.g., the bolts 108), at least a portion of the profiled pieces being arranged to project beyond a screen surface (see FIG. 1, in which the hexagonal head of the bolts 108 is spaced above the surface of the screen by parts 106).

Concerning claim 2, Aikawa discloses side surfaces of the profiled pieces 108 as being positioned essentially perpendicular to the screen surface (e.g., hexagonal side surfaces of the bolts).

As to claim 4, Aikawa discloses the profiled pieces 108 as having a regular polygon shaped profile (see FIG. 1).

Regarding claim 11, Aikawa discloses the fastening holes as being circular (e.g., circular threaded holes receiving the shank portion of the bolts 108) with a diameter that is smaller than a corner measurement of the profiled pieces.

Concerning claim 14, Aikawa et al disclose fastening holes arranged in groups with the fastening holes of each group being arranged in a line (see FIG. 1).

As to claim 15, Aikawa et al disclose edges of adjacent fastening holes that are spaced only a short distance from one another (see FIG. 1).

Concerning claim 16, Aikawa discloses the lines of the fastening holes as being straight (see FIG. 1).

As to claim 20, Aikawa discloses mounting ridges 106 on the screen plate.

Claims 1-3, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gero et al '212.

With respect to claim 1, Gero et al disclose a process for manufacturing screens suitable for use in a wet screening fibrous paper suspensions including at least one screen plate (see FIG. 3) having a number of sorting apertures 28, the process including providing a number of fastening openings in the at least one screen plate (e.g., defined by corrugations of the screen material), and inserting profiled pieces 50, at least a portion 52 of the profiled pieces being arranged to project beyond a screen surface.

Concerning claim 2, Gero et al disclose side surfaces of the profiled pieces as being positioned essentially perpendicular to the screen surface (e.g., perpendicular to a peak of the corrugations of the screen surface).

With respect to claims 3 and 10, Gero et al discloses side surfaces 52 that extend beyond the screen surface by at least 2 mm and no more than 30 mm as recited in claim 3, or by at least 2 mm and no more than 15 mm as recited in claim 10 (see line 67 of col. 5).

Claims 1, 2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gero et al '986.

With respect to claim 1, Gero et al disclose a process for manufacturing screens suitable for use in a wet screening fibrous paper suspensions including at least one screen plate (see FIG. 29) having a number of sorting apertures 62 (see FIG. 28), the process including providing a number of fastening openings in the at least one screen plate (e.g., defined by corrugations of the screen material), and inserting profiled pieces 180, at least a portion of the profiled pieces being arranged to project beyond a screen surface.

Concerning claim 2, Gero et al disclose side surfaces of the profiled pieces as being positioned essentially perpendicular to the screen surface (e.g., perpendicular to a peak of the corrugations of the screen surface).

As to claim 6, Gero et al disclose the profiled pieces as being formed of a highly wear resistant material (see lines 28-30 of col. 10).

Claims 1, 2, 11-13, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Doelle et al.

With respect to claim 1, Doelle et al disclose a process for manufacturing screens 16 suitable for use in a wet screening fibrous paper suspensions including at least one screen plate (see FIG. 1) having a number of sorting apertures (e.g., within inserts 26), the process including providing a number of fastening openings 30 in the at least one screen plate, and inserting profiled pieces 26, at least a portion of the profiled pieces being arranged to project beyond a screen surface (see FIG. 1).

Concerning claim 2, Doelle et al disclose side surfaces of the profiled pieces 26 as being positioned essentially perpendicular to the screen surface.

Regarding claim 11, Doelle et al disclose the fastening holes as being circular with a diameter that is smaller than a corner measurement of the profiled pieces (e.g., since the profile pieces are press fitted into the openings, see lines 53-66 of col. 3 and FIG. 3).

As to claim 12, Doelle et al disclose force fitting the profiled pieces 26 into the fastening holes (see lines 53-66 of col. 3 and FIG. 3).

Regarding claim 13, Doelle et al disclose the fastening holes as being provided to go through the screen plate and to have a larger cross section on a side of the screen plate at which the profiled pieces are inserted than on an opposite side of the screen plate (see FIGS. 5 and 6).

Concerning claim 16, Doelle et al disclose edges of adjacent fastening holes 30 as being spaced a short distance from one another (see FIG. 1).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 6, 9, 10, 17-19, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aikawa.

With respect to claims 3 and 10, Aikawa fails to specify side surfaces that extend beyond the screen surface by at least 2 mm and no more than 30 mm as recited in claim 3, or by at least 2 mm and no more than 15 mm as recited in claim 10, however, such a modification would have been obvious in order to optimize the gripping area on the hexagonal heads of the bolts 108 as well as the height of the cutters 106 for a particular screening operation.

Concerning claim 5, Aikawa fails to specify octagonal shape, however, such a shape is considered obvious absent any showing that such a configuration was significant (see *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)).

As to claim 6, Aikawa fails to specify the profiled pieces as being made of a highly wear resistant material, however, such a modification, for example, forming the bolts out of high strength steel of which is considered highly wear resistant as compared

to a bolt formed of plastic material, would have been obvious in order to optimize the strength of the bolts 108 for a particular screening operation.

Concerning claim 9, Aikawa fails to specify the cross sectional area of the profiled pieces as being between 50-200 mm², however, such a modification would have been obvious in order to optimize the strength of the bolts 108 for a particular application.

As to claims 17 and 18, Aikawa fails to specify the lines of the fastening holes as being curved or zigzag shaped, however, such a modification would have been obvious in order to fasten cutters 106 to the surface of the screen having a curved or zigzag shape, such cutter shapes being considered obvious absent any showing that such a configuration was significant (see *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)).

Regarding claim 19, Aikawa discloses fastening holes positioned separately (e.g., spaced separately from each other) on the screen plate and spaced out (e.g., spaced out/apart from each other) at a distance. Aikawa fails to specify a spacing of 50 mm, however, such a modification would have been obvious in order to optimize the strength of mechanical connection required to fasten the cutter 106 to the surface of the screen.

As to claim 21, Aikawa discloses the sorting apertures as having a circular cross section but fails to specify the apertures as having a diameter of 1-30 mm, however, such a modification would have been obvious in order to optimize the screening function

Art Unit: 1724

of the apparatus for a particular application, for example, when it was desired to isolate fibers having a maximum size of between 1-30 mm.

As to claim 22, Aikawa fails to specify the screen plate as being formed from a high strength metal alloy, however, such a modification would have been obvious in order to optimize the strength of the screen for a particular application.

Claims 3, 10, 16-18, 19, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doelle et al.

With respect to claims 3 and 10, Doelle et al fail to specify side surfaces that extend beyond the screen surface by at least 2 mm and no more than 30 mm as recited in claim 3, or by at least 2 mm and no more than 15 mm as recited in claim 10, however, such a modification would have been obvious in order to optimize pulping of fiber for a particular application (see lines 16-19 of col. 3).

As to claims 16-18, Doelle et al fail to specify the lines of the fastening holes as being straight, curved or zigzag shaped, however, such a modifications are considered obvious absent any showing that such a configuration was significant (see *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)).

Regarding claim 19, Doelle et al disclose fastening holes positioned separately (e.g., spaced separately from each other) on the screen plate and spaced out (e.g., spaced out/apart from each other) at a distance. Aikawa fails to specify a spacing of 50 mm, however, such a modification would have been obvious in order to optimize the

strength of mechanical connection required to fasten the cutter 106 to the surface of the screen.

As to claim 21, Doelle et al disclose the sorting apertures as having a circular cross section but fails to specify the apertures as having a diameter of 1-30 mm, however, such a modification would have been obvious in order to optimize the screening function of the apparatus for a particular application, for example, when it was desired to isolate fibers having a maximum size of between 1-30 mm.

As to claim 22, Doelle et al fail to specify the screen plate as being formed from a high strength metal alloy, however, such a modification would have been obvious in order to optimize the strength of the screen for a particular application.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gero et al '212 or Gero et al '986.

With respect to claim 21, Gero et al '212 discloses sorting apertures having a circular cross section (see FIG. 3) but fail to specify the apertures as having a diameter of 1-30 mm, however, such a modification would have been obvious in order to optimize the screen for a particular application.

As to claim 22, Gero et al '212 or '986 fails to specify the screen plate as being formed from a high strength metal alloy, however, such a modification would have been obvious in order to optimize the strength of the screen for a particular application.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gero et al '986 in view of Massa et al.

Concerning claim 7, Gero et al fail to specify the profiled pieces 180 as being formed of a sintered metal alloy. Massa et al discloses a sintered metal alloy (see lines 12-18 of col. 6, and lines 11-13 of col. 10) and teaches that such a material is wear resistant since it can be used as a cutting insert (see lines 40-47 of col. 4). It would have been obvious to have modified the apparatus of Gero et al so as to have included profiled pieces formed of a sintered metal alloy as suggested by Massa et al since Massa et al teach that such a material is resistant to wear.

As to claim 8, Massa et al disclose articles formed of sintered tungsten carbide powder (see lines 12-18 of col. 6).

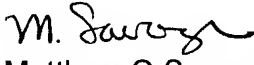
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Matthew O Savage
Primary Examiner
Art Unit 1724

mos
August 11, 2004